

ABSTRACT OF THE DISCLOSURE

An invisible symbol reading apparatus includes a heating unit for heating an invisible symbol formed on a sample and containing a material which emits infrared light when heated, a detecting unit for detecting infrared light emitted from the invisible symbol, and an arithmetic operation unit for binarizing a detection signal from the detecting unit. The arithmetic operation unit calculates a differential coefficient of the detection signal, that corresponds to a position on the sample. On the basis of upper and lower threshold values set for the differential coefficient, the arithmetic operation unit determines a maximum value of the differential coefficient in a region exceeding the upper threshold value and a minimum value of the differential coefficient in a region smaller than the lower threshold value. The arithmetic operation unit binarizes the detection signal by using the maximum or minimum value as a leading or trailing edge of a binary function.